THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 322 AND MARLBORO ROAD IN TALBOT COUNTY. THE WORK IS NECESSITATED BY THE CONSTRUCTION OF A FOURTH LEG TO THE INTERSECTION. MD 322 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

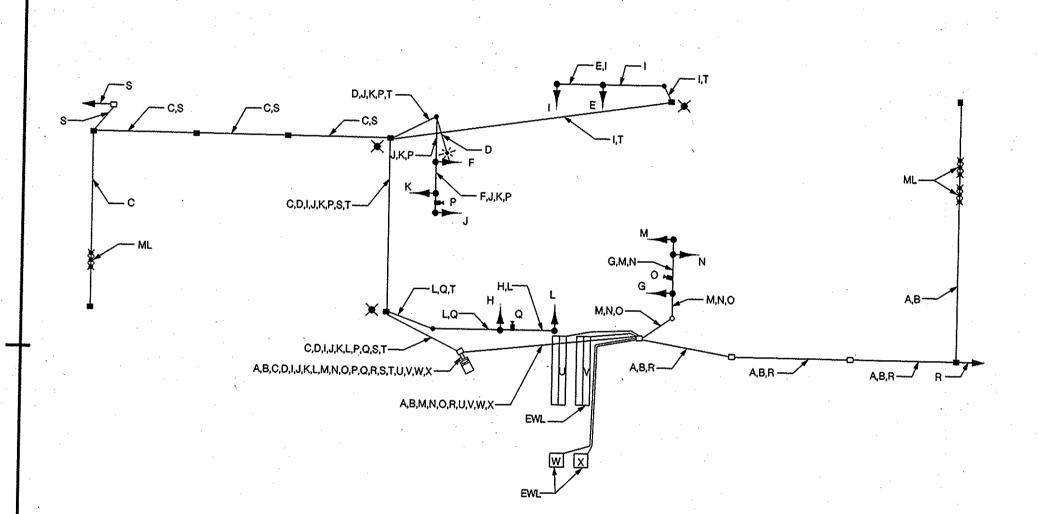
## INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA FOUR-PHASE, FULLY-ACTUATED MODE WITH AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FOR S.B. MD 322. THE INTERSECTION WILL NOW OPERATE IN A NEMA SIX-PHASE, FULLY-ACTUATED MODE WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR N.B. AND S.B. MD 322.

## CONTROLLER REQUIREMENTS

THE EXISTING EIGHT-PHASE, FULLY-ACTUATED CONTROLLER HOUSED IN A NEMA "6" BASE MOUNTED CABINET WILL BE USED.

### WIRING DIAGRAM



#### WIRING KEY

A-C MICRO-LOOP PROBE LEAD-IN
D 2-CONDUCTOR ELECTRICAL CABLE
(NO. 12 A.W.G.) TRAY CABLE
E-H 5-CONDUCTOR ELECTRICAL CABLE
(NO. 14 A.W.G.)
I-N 7-CONDUCTOR ELECTRICAL CABLE
(NO. 14 A.W.G.)
O-Q VIDEO DETECTION CABLE
R-S EXISTING 12-PAIR VOICE GRADE
INTERCONNECT CABLE
T STRANDED BARE COPPER GROUND
WIRE (NO. 6 A.W.G.)
U-X EXISTING 2-CONDUCTOR ELECTRICAL

CABLE (ALUMINUM SHIEDED)

EXISTING LOOP WIRE (NO. 14 A.W.G.)

MICRO-LOOP PROBE

GROUND ROD

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

**DESCRIPTION** 

ITEM NO. QUANTITY

NONE

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
3 CY	TEST PIT EXCAVATION
140 LF	FURNISH AND INSTALL 24 IN WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
2 EA	FURNISH AND INSTALL 250 FT. VIDEO DETECTION CABLE
32 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
1 EA	FURNISH AND INSTALL 15 FT. STREET LIGHTING ARM
1 EA	FURNISH AND INSTALL 250 WATT HPSV LUMINAIRE
6 EA	FURNISH AND INSTALL 8 IN. VEHICULAR SIGNAL HEAD SECTION
2 EA	FURNISH AND INSTALL 50 FT.MAST ARM AND POLE
1 EA	FURNISH AND INSTALL 60 FT.MAST ARM AND POLE
2 EA	FURNISH AND INSTALL NON-INVASIVE MICRO-LOOP PROBE SET WITH 1000 FT. LEAD-IN
1 EA	FURNISH AND INSTALL NON-INVASIVE MICRO-LOOP PROBE SET WITH 500 FT. LEAD-IN
LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
3 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
1 EA	FURNISH AND INSTALL VIDEO INTERFACE EQUIPMENT
460 LF	FURNISH AND INSTALL 3 IN SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
210 LF	FURNISH AND INSTALL 4 IN SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
40 LF	FURNISH AND INSTALL 4 IN SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
11 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
340 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER WIRE
170 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
8 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
3 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
100 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 A.W.G.)
1350 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 A.W.G.)
220 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (NO. 12 A.W.G.) - TRAY CABLE
1 EA	FURNISH AND INSTALL D3-2 DUAL FACE SIGN (VAR. X 16") - MAST ARM MOUNT
2 EA	FURNISH AND INSTALL R3-5(L) SIGN (30" X 36") - MAST ARM MOUNT
4 EA	FURNISH AND INSTALL ASSOCIATED SHIELD ASSEMBLY
1060 LF	REMOVE AND RE-INSTALL EXISTING CABLE
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#### EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO. QUA

NTITY DESC

**DESCRIPTION** 

NONE

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

# CONTACT PERSONS FOR DISTRICT 2 ARE AS FOLLOWS:

MR. ROBERT KIEL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 778-3061

MR. TERRY WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE

(410) 778-3061

MR. BARRY CLOTHIER

ASSISTANT DISTRICT ENGINEER - UTILITIES (410) 778-3061

# CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. ROBERT, SNIVDER

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787–7631

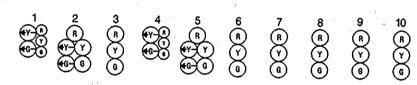
MS DARLENE EIDE SUPPLY OFFICE SIGNAL SHOP WAREHOUSE

(410) 787-7676

(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

# PHASING CHART



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SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN

MD 322 AND MARLBORO ROAD

RAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054

(410) 923-7101 FAX (410) 923-6473 EMAIL TRAFFIC.CONCEPTS@COMCAST.NET 
 SCALE
 NONE
 DATE
 APRIL-2007
 CONTRACT NO.
 BW 996M82

 DESIGNED BY
 T. ZAYDEL
 COUNTY
 TALBOT

 DRAWN BY
 T. ZAYDEL
 LOGMILE
 2032203.29

 CHECKED BY
 K. SCHMID
 T.I.M.S. NO.
 H 447

 F.A.P. NO.
 N/A
 TOD NO.

 DRAWING NO.
 TS-3388D GI
 SHEET NO.
 2 OF 2